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Timothy N. Trop
TROP PRUNER & HU, P.C.
STE 100
8554 KATY FWY
HOUSTON, TX 77024-1805

EXAMINER

LE, DANH C

ART UNIT PAPER NUMBER

2683

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DATE MAILED: 09/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/038,961

Applicant(s)

BAJIKAR, SUNDEEP M.

Examiner

DANH C LE

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,11,12,16,17,21,22 and 26 is/are rejected.
- 7) ☒ Claim(s) 3-10,13-15,18-20,23-25 and 27-30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 17-20 are objected to because of the following informalities:

Claims 17-20 should depend on claim 16.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 1, 2, 16 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Baranowsky (US 5,732,359).**

As to claim 1, Baranowsky teaches a method (figure 1) comprising:

providing at least two wireless transceiver interfaces (transceiver 12 has an RF section 18 which communicates with satellite 60 and cellular transceiver), and

disabling one wireless transceiver interface while another wireless transceiver interface is conducting communication (col.9, lines 5-10).

As to claim 2, Baranowsky teaches the method of claim 1(col.2, line 38-col.3, line 14), including:

detecting activity signals from said at least two wireless transceiver interfaces (col.2, lines 51-53);

assigning a priority to each said wireless transceiver interface (auto-roam satellite priority, auto-roam cellular priority);

tracking a potential communication associated with each said wireless transceiver interface (detect the threshold value);

arbitrating control of communication between said at least two wireless transceiver interfaces based on the priority and the potential communication (col.3, lines 29-42); and

selectively energizing each said wireless transceiver interface based on the control of communication (col.3, lines 29-42).

As to claim 16, Baranowsky teaches an article comprising a medium storing instructions that enable a processor-based system (figure 1) to:

provide at least two wireless transceiver interfaces (transceiver 12 has an RF section 18 which communicates with satellite 60 and cellular transceiver); and

disable one wireless transceiver interface while another wireless transceiver interface is conducting communication (col.9, lines 5-10).

As to claim 17, Baranowsky teaches the article of claim 15 further storing instructions that enable the processor base system (figure 1, 40) to:

detect activity signals from said at least two wireless transceiver interfaces (col.2, lines 51-53);

assign a priority to each said wireless transceiver interface (auto-roam satellite priority, auto-roam cellular priority);

track a potential communication associated with each said wireless transceiver interface (detect the threshold value);

arbitrate control of communication between said at least two wireless transceiver interfaces based on the priority and the potential communication (col.3, lines 29-42);
and

selectively energize each said wireless transceiver interface based on the control of communication (col.3, lines 29-42).

4. Claims 21 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Gulick (US 6,697,890).

As to claim 21, Gulick teaches a processor-based system (figure 2) comprising:
a processor (10A);

a storage (130 and col.5, lines 30-37) operably coupled to said processor to store a priority protocol capable of tracking pending transactions associated with at least two active wireless transceivers and prioritizing one of said at least two active wireless transceivers;

at least two wireless transceiver interface devices (110, 120) operably coupled to said processor to provide corresponding gating signals associated with the at least two active wireless transceivers; and

an arbitration device (140, col.2. line 66-col.3, line, 2 and col.5, lines 56-64)
operably coupled to said at least two wireless transceiver interface devices to

selectively provide communication control to said one of at least two active wireless transceivers based on the priority protocol.

As to claim 26, Gulick teaches a personal computer system comprising:

a processor (10A);

a storage (130 and col.5, lines 30-37) operably coupled to said processor to store a priority protocol capable of tracking pending transactions associated with at least two active wireless transceivers and prioritizing one of said at least two active wireless transceivers; and

a shared interface (150 and col.6, lines 53-67) to operably couple a chipset with a radio device interface including:

at least two wireless transceiver interface devices (110, 120) operably coupled to said processor to provide corresponding gating signals associated with the at least two active wireless transceivers, and

an arbitration device (140, col.2. line 66-col.3, line, 2 and col.5, lines 56-64) operably coupled to said at least two wireless transceiver interface devices to selectively provide communication control to said one of at least two active wireless transceivers based on the priority protocol.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baranowsky in view of Koskinen (US 2002/0004383).

As to claim 11, Baranowsky teaches an apparatus (figure 1) comprising:

a first communication interface corresponding to a first wireless system (satellite system),

a second communication interface corresponding to a second wireless system (cellular system); and

a module (40) operably coupled to the first and second communication interfaces to disable communication between the first communication interface and said first wireless system while the second communication interface is conducting communication for said second wireless system.

Baranowsky fails to teach first and second wireless systems are wireless device. Koskinen teaches first and second wireless systems are wireless device (paragraph 0025). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Koskinen into the system of Baranowsky in order to implement data transmission with other device via short range radio as Koskinen suggested (paragraph 0025).

7. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baranowsky and Koskinen in view of Krasner (US 6,107,960).

As to claim 12, the combination of Baranowsky and Koskinen teaches the apparatus of claim 11, wherein said first communication interface to provide a first

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activity signal, said second communication interface to provide a second activity signal, and said module to:

detect (col.2, lines 51-53) the first and second activity signals, assign a priority to each said active wireless device, track a potential communication associated with each said communication interface, and to arbitrate control of communication between the first and second communication interfaces based on the priority and the potential communication corresponding to said first and second wireless devices; and

selectively energize the first and second communication interfaces based on signal threshold (Baranowsky, col.2, lines 54-67)

The combination of Baranowsky and Koskinen fails to teach the communication protocol to mitigate cross-interference between said first and second wireless devices. Krasner teaches the communication protocol to mitigate cross-interference between said first and second wireless devices (col.6, lines 29-50). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Krasner into the system of Baranowsky and Koskinen in order to conserve physical space or reduce cost as Krasner suggested (col.6, lines 29-50).

8. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gulick in view of Shaffer (US 6,377,798) and Krasner (US 6,107,960).

As to claim 22, Gulick teaches the processor-based system of claim 21, Gulick fails to teach arbitration device selectively powers up or down the at least two wireless transceiver interface devices based on the communication control to mitigate cross-interference between said at least two active wireless transceivers. Shaffer teaches

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arbitration device selectively powers up or down the at least two wireless transceiver interface devices based on the communication control (col.3, lines 12-32). Krasner teaches mitigate cross-interference between said at least two active wireless transceivers (col.6, lines 29-50). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Shaffer and Krasner into the system of Baranowsky and Koskinen in order to conserve physical space or reduce cost as Krasner suggested (col.6, lines 29-50).

Allowable Subject Matter

9. **Claims 3-10, 13-15, 18-20, 23-25, 27-30** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As to claims 3, 13, 18, 27, the teaching of above prior arts either alone or in combination fails to teach deriving device characteristics and priority information from the priority and the type of each said wireless transceiver interface, and sending said device characteristics and priority information to each said wireless transceiver interface.

Dependent claims 4-10, 14-15, 19-20, 24-25, 28-30 are objected for the same reason

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- A. Quinn et al (US 2002/01377472) teaches wireless antenna switching system.

B. Talwar et al (US 5,729,829) teaches interference mitigate method and apparatus for multiple collocated transceiver.

C. Coombes (US 4,635,285) teaches communication system with voice priority for remote stations.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANH C LE whose telephone number is 703-306-0542. The examiner can normally be reached on 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, WILLIAM TROST can be reached on 703-308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



September 18, 2004.

DANH CONG LE
PATENT EXAMINER